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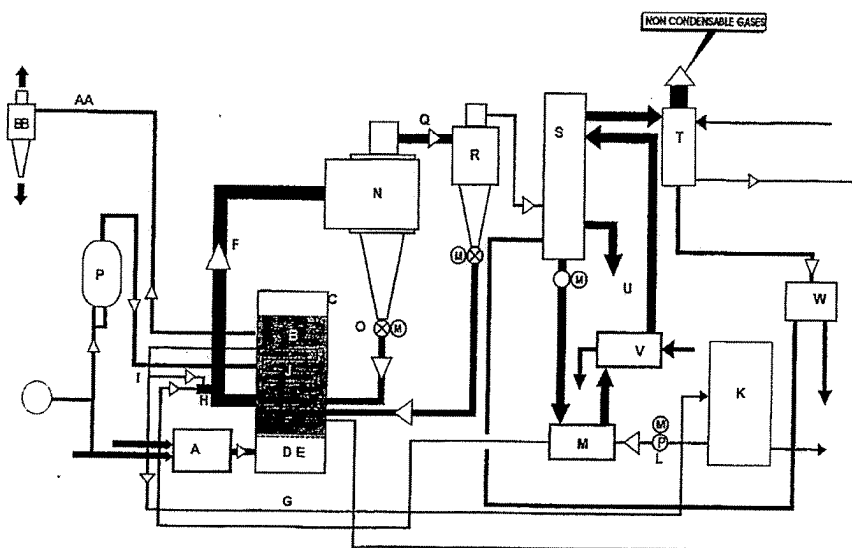
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(54) Title: **LOW TEMPERATURE THERMODYNAMIC CRACKING AND CONVERSION FOR UPGRADING OF HEAVY OILS**



(57) Abstract: The present invention provides a thermodynamic cracking process wherein the cracking takes place in a cyclone reactor and in a riser of varying areas under the influence of a rotating and turbulent fluidised energy carrier which is put in motion in a fluidised regenerator by injection of combustion gases or air. A cracking unit is also described.